

## **CONSTRUCTION SPECIFICATION**

### **MI-108. GRASSED WATERWAY**

1. **SCOPE**

The work shall consist of excavating, filling and shaping as necessary for the construction of the waterways as shown on the drawings or at locations as directed by the NRCS inspector.

2. **MATERIALS**

All material shall be obtained from the required excavation and designated borrow areas. The fill material shall be free from frozen particles, brush, roots, sod or other objectionable material, and rock particles larger than 6 inches (150 mm) in diameter.

3. **FOUNDATION PREPARATION**

The foundation area of required fill sections shall be cleared and grubbed and stripped of unsuitable material, prior to placing fill. Available topsoil shall be salvaged and stockpiled for later spreading. Vertical banks shall be cut to a 1:1 or flatter slope.

4. **PLACEMENT**

Fill shall not be placed until the required excavation and foundation preparation have been completed and the foundation has been inspected and approved by the NRCS inspector. Fill shall not be placed upon a frozen surface, nor shall snow, ice or frozen material be incorporated in the fill.

Fill will be started at the lowest part of the section under construction and will be placed in approximately uniform horizontal layers of not more than 9 inches (230 mm) in thickness to the lines and grades shown on the drawings. The moisture content of the fill material shall be such that when kneaded in the hand, the soil forms a ball which does not readily separate.

The fill sections shall be compacted by either:

- (a) Routing of the hauling and spreading equipment over the fill in such a manner that the entire surface of each layer of fill will be traversed by not less than one tread track of the equipment, or
- (b) Equivalent methods approved by the NRCS inspector.

5. **EXCAVATION**

Excavation shall be to the lines and grades shown on the drawings. All surplus or unsuitable excavated materials shall be disposed of at the locations shown on the drawings or at locations approved by the NRCS inspector.

6. **TOPSOIL SPREADING**

Stockpiled topsoil shall be spread on the waterway flow area to a depth of not less than 3 inches (80 mm) unless otherwise approved by the NRCS inspector. Spreading shall not be done when the ground or topsoil is frozen, excessively wet or otherwise in a condition detrimental to the work. After placement is complete the topsoil surface shall be finished to a reasonably smooth surface.

7. **SEEDING**

During and/or immediately following construction, the waterway shall be prepared, fertilized, seeded and mulched in accordance with the Construction Specification Seeding.